Re:Volve
re:newable energy

YOUR SOLAR PV USER GUIDE

How do Solar
Photovoltaic (PV) panels work?

Systems convert energy from the sun into electricity. A solar PV installation (sometimes known as an array) is made up of a number of modules/panels. A panel is made up of solar cells connected together in a series which are in turn connected to an inverter (usually located in the loft or garage).

The inverter converts DC (direct current) electrical power from the panels into AC (alternating current) electricity, which can be used to power your household appliances and feed into the national grid. When your panels are producing electricity, it is the inverter which monitors the voltage to make sure your home draws power preferentially from the panels not the national grid.

Then, when there is little or no daylight, your appliances will automatically switch to draw electricity from the national grid instead.

Your panels will not provide you with all the electricity you need to run your home so you will still have an electricity bill to pay. However, adapting your behaviour and routine can help you get the most out of your panels and keep your bills as low as possible.

Re:Volve
re:newable energy

Getting the most out of your system. Use your electrical appliances during daylight hours as much as possible.

- Use appliances that use a lot of electricity in the middle of the day, when solar radiation is at its strongest, items such as irons, cookers and washing machines are particularly high usage.
- Try to charge electrical items through the day.
- Use electrical showers in the hours of daylight where possible.
- Try cooking in the hours of daylight.
- Remember that the best time to use your appliances is during the hours of daylight.

Try to use less electricity. The most effective way to save money on your electricity bill is to simply use as little electricity as possible. You can achieve this by:

- Remembering to switch lights off.
- Dry you clothes outside where possible rather than using a tumble dryer.
- Don't leave things such as TVs on standby.

Try not to use too much electricity at once. Your system may not be able to power all the appliances that you wish to use throughout the day at once, even in direct sunlight.

Make the most out of your solar system; use as few appliances at once as you can during the daytime, for example:

- Use your hoover before or after you have done the washing.
- Have a shower before or after you turn the washing machine on.
- Don't start your ironing until the washing cycle has finished.

Re:Volve
re:newable energy

Maintaining your system
Looking after your panels:

In most circumstances Solar PV modules (panels) are very low maintenance, however it is important to occasionally inspect the panels for excess grime and dirt, as dirty panels may not perform as well as clean panels.

The most common maintenance task for you panels will be the cleaning of the glass area of the module to remove excess dirt, this can be done simply with warm water and a sponge.

Please note that roof mounted panels should only be cleaned from ground level for health and safety reasons, this can be done easily with a telescopic sponge. If you are not able to do this yourself; most window cleaners now offer this as a service.

How might I be able to tell
if my system stops working?

The other key components of your system are the inverter and the meter, these can be used as indicators of the system's performance and therefore if you check them regularly, they can let you know if your system has stopped working properly, they should also be well maintained by being kept clear of dust etc. Your installer will have explained to you how your system works and how to properly check it's performance.

Re:Volve
re:newable energy

tel: 0191 236 1300 | **web:** www re-volve co uk | **email:** info@re-volve co uk